

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.038
Model:              OLS  Adj. R-squared:    0.032
Method:             Least Squares  F-statistic:    5.983
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  0.00283
Time:               12:11:35  Log-Likelihood:  -875.72
No. Observations:   304  AIC:              1757.
Df Residuals:       301  BIC:              1769.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const                11.1284    1.766    6.301   0.000    7.653   14.604
# of past defaults      -0.2727    0.225   -1.211   0.227   -0.716    0.171
ln_GDP per capita (constant 2015 US$) -0.7429    0.218   -3.410   0.001   -1.172   -0.314
=====
```

```
=====
Omnibus:             136.808  Durbin-Watson:      2.013
Prob(Omnibus):        0.000  Jarque-Bera (JB):    493.184
Skew:                 2.005  Prob(JB):            8.06e-108
Kurtosis:             7.781  Cond. No.            56.9
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 8.21043668036792
LM P-Value: 0.14501304772216436
F Statistic: 1.6543586618069501
F P-Value: 0.14555395152956954

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|-----------|--------|--------|--------|--------|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.032 | | | | |
| Model: | OLS | Adj. R-squared: | 0.023 | | | | |
| Method: | Least Squares | F-statistic: | 3.544 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0306 | | | | |
| Time: | 12:11:36 | Log-Likelihood: | -624.50 | | | | |
| No. Observations: | 217 | AIC: | 1255. | | | | |
| Df Residuals: | 214 | BIC: | 1265. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 10.4839 | 2.080 | 5.040 | 0.000 | 6.383 | 14.584 | |
| Adjusted savings: gross savings (% of GNI) | | 0.0065 | 0.026 | 0.254 | 0.799 | -0.044 | 0.057 |
| ln_GDP per capita (constant 2015 US\$) | | -0.7169 | 0.271 | -2.641 | 0.009 | -1.252 | -0.182 |
| ===== | | | | | | | |
| Omnibus: | 112.087 | Durbin-Watson: | 1.959 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 456.254 | | | | |
| Skew: | 2.155 | Prob(JB): | 8.43e-100 | | | | |
| Kurtosis: | 8.647 | Cond. No. | 163. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.5244999920983138
LM P-Value: 0.619683753553416
F Statistic: 0.6967258521986985
F P-Value: 0.6264696043851103

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.033

Model:

OLS

Adj. R-squared:

0.024

Method:

Least Squares

F-statistic:

3.672

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0270

Time:

12:11:37

Log-Likelihood:

-624.37

No. Observations:

217

AIC:

1255.

Df Residuals:

214

BIC:

1265.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

10.4694

2.079

5.035

0.000

6.371

14.568

Adjusted savings: net national savings (% of GNI)

0.0137

0.025

0.559

0.577

-0.035

0.062

ln_GDP per capita (constant 2015 US\$)

-0.7138

0.266

-2.688

0.008

-1.237

-0.190

Omnibus:

112.009

Durbin-Watson:

1.964

Prob(Omnibus):

0.000

Jarque-Bera (JB):

456.950

Skew:

2.152

Prob(JB):

5.95e-100

Kurtosis:

8.659

Cond. No.

109.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.8957128242974104
LM P-Value: 0.564526474698707
F Statistic: 0.7714489622154129
F P-Value: 0.5712859160841215

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.029
Model:              OLS  Adj. R-squared:    -0.046
Method:            Least Squares  F-statistic:    0.3892
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.681
Time:              12:11:37  Log-Likelihood:    -76.133
No. Observations:    29  AIC:      158.3
Df Residuals:        26  BIC:      162.4
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const              7.5441    6.804    1.109  0.278   -6.443   21.531
Banking Crisis Dummy              2.1571    2.681    0.805  0.428   -3.354    7.668
ln_GDP per capita (constant 2015 US$)  -0.4152    0.739   -0.562  0.579   -1.934    1.104
=====
```

```
=====
Omnibus:      46.806  Durbin-Watson:      2.355
Prob(Omnibus):    0.000  Jarque-Bera (JB):    219.550
Skew:           3.219  Prob(JB):      2.11e-48
Kurtosis:       14.842  Cond. No.      97.9
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 0.7022135979721175
LM P-Value: 0.9510556590059156
F Statistic: 0.14889085414577766
F P-Value: 0.9616909851217869

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.034
Model:              OLS  Adj. R-squared:    0.026
Method:             Least Squares  F-statistic:    4.546
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.0115
Time:              12:11:38  Log-Likelihood:   -759.53
No. Observations:   263  AIC:              1525.
Df Residuals:       260  BIC:              1536.
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              10.6006    1.886    5.620   0.000    6.886   14.315
Broad money growth (annual %)   -0.0092    0.014   -0.680   0.497   -0.036    0.017
ln_GDP per capita (constant 2015 US$) -0.7123    0.240   -2.973   0.003   -1.184   -0.241
=====
```

```
=====
Omnibus:           135.002  Durbin-Watson:      2.050
Prob(Omnibus):      0.000  Jarque-Bera (JB):    566.701
Skew:               2.206  Prob(JB):            8.76e-124
Kurtosis:           8.678  Cond. No.             198.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.41508452741801
LM P-Value: 0.36734703343323394
F Statistic: 1.080557625816847
F P-Value: 0.3715244468412457

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.022
Model:              OLS  Adj. R-squared:    0.013
Method:            Least Squares  F-statistic:    2.652
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.0726
Time:              12:11:38  Log-Likelihood:   -684.52
No. Observations:   243  AIC:              1375.
Df Residuals:       240  BIC:              1386.
Df Model:           2
Covariance Type:    nonrobust
=====
```

| | coef | std err | t | P> t | [0.025 | 0.975] | |
|--|---------|---------|--------|-------|--------|--------|-------|
| const | 8.4529 | 1.845 | 4.582 | 0.000 | 4.818 | 12.087 | |
| Broad money to total reserves ratio | | 0.0146 | 0.016 | 0.909 | 0.364 | -0.017 | 0.046 |
| ln_GDP per capita (constant 2015 US\$) | -0.4920 | 0.235 | -2.094 | 0.037 | -0.955 | -0.029 | |

```
=====
Omnibus:           131.395  Durbin-Watson:      2.006
Prob(Omnibus):     0.000  Jarque-Bera (JB):    606.056
Skew:              2.265  Prob(JB):            2.49e-132
Kurtosis:          9.272  Cond. No.            126.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.785141648796898
LM P-Value: 0.44266060554609077
F Statistic: 0.9521476356381419
F P-Value: 0.4480090394601143

Regression Summary:

OLS Regression Results

Dep. Variable: length_db

R-squared: 0.103

Model: OLS

Adj. R-squared: 0.070

Method: Least Squares

F-statistic: 3.156

Date: Wed, 30 Aug 2023

Prob (F-statistic): 0.0504

Time: 12:11:39

Log-Likelihood: -130.04

No. Observations: 58

AIC: 266.1

Df Residuals: 55

BIC: 272.3

Df Model: 2

Covariance Type: nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

3.7119

2.489

1.491

0.142

-1.276

8.700

Central government debt, total (% of GDP)

0.0233

0.009

2.504

0.015

0.005

0.042

ln_GDP per capita (constant 2015 US\$)

-0.1528

0.299

-0.511

0.611

-0.752

0.446

Omnibus: 27.393

Durbin-Watson: 2.259

Prob(Omnibus): 0.000

Jarque-Bera (JB): 47.046

Skew: 1.620

Prob(JB): 6.08e-11

Kurtosis: 5.995

Cond. No. 501.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.9033976493105293
LM P-Value: 0.5634066045793528
F Statistic: 0.7504230171363457
F P-Value: 0.5895462205816753

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.032

Model:

OLS

Adj. R-squared:

0.025

Method:

Least Squares

F-statistic:

4.486

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0121

Time:

12:11:39

Log-Likelihood:

-785.42

No. Observations:

273

AIC:

1577.

Df Residuals:

270

BIC:

1588.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

10.0380

1.744

5.755

0.000

6.604

13.472

Claims on central government, etc. (% GDP)

0.0052

0.013

0.400

0.689

-0.020

0.031

ln_GDP per capita (constant 2015 US\$)

-0.6642

0.224

-2.969

0.003

-1.105

-0.224

Omnibus:

140.238

Durbin-Watson:

2.037

Prob(Omnibus):

0.000

Jarque-Bera (JB):

604.273

Skew:

2.208

Prob(JB):

6.08e-132

Kurtosis:

8.798

Cond. No.

148.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.94474982524803
LM P-Value: 0.22478187184532136
F Statistic: 1.3938820618073182
F P-Value: 0.22677343054609703

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|--|------------------|---------------------|-----------|---------|-------|--------|--------|--------|--------|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.033 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.026 | | | | | | |
| Method: | Least Squares | F-statistic: | 4.466 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0124 | | | | | | |
| Time: | 12:11:40 | Log-Likelihood: | -754.35 | | | | | | |
| No. Observations: | 261 | AIC: | 1515. | | | | | | |
| Df Residuals: | 258 | BIC: | 1525. | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | nonrobust | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | t | P> t | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 10.4574 | 1.863 | 5.613 | 0.000 | 6.789 | 14.126 | | |
| Claims on private sector (annual growth as % of broad money) | | | | 0.0101 | 0.015 | 0.659 | 0.510 | -0.020 | 0.040 |
| ln_GDP per capita (constant 2015 US\$) | | | | -0.7314 | 0.245 | -2.988 | 0.003 | -1.213 | -0.249 |
| ===== | | | | | | | | | |
| Omnibus: | 135.170 | Durbin-Watson: | 2.036 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 573.025 | | | | | | |
| Skew: | 2.222 | Prob(JB): | 3.71e-125 | | | | | | |
| Kurtosis: | 8.739 | Cond. No. | 158. | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.222853333805789
LM P-Value: 0.6656718959357828
F Statistic: 0.6376264232489859
F P-Value: 0.6711900687024028

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.101
Model:              OLS  Adj. R-squared:    0.094
Method:             Least Squares  F-statistic:    13.83
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  1.95e-06
Time:               12:11:40  Log-Likelihood:  -746.51
No. Observations:   263  AIC:              1499.
Df Residuals:       260  BIC:              1510.
Df Model:            2
Covariance Type:    HC3
=====
```

```
=====
              coef  std err      z    P>|z|    [0.025    0.975]
-----
const              11.0370    1.976    5.586    0.000    7.165    14.909
Consumer price index (2010 = 100)   -0.0306    0.006   -4.875    0.000   -0.043   -0.018
ln_GDP per capita (constant 2015 US$) -0.5440    0.231   -2.356    0.018   -0.997   -0.091
=====
```

```
=====
Omnibus:           123.420  Durbin-Watson:      1.933
Prob(Omnibus):     0.000  Jarque-Bera (JB):    487.068
Skew:              2.005  Prob(JB):          1.72e-106
Kurtosis:          8.326  Cond. No.           502.
=====
```

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 14.757421051472413
LM P-Value: 0.011450719962330576
F Statistic: 3.055605711391521
F P-Value: 0.010678199971112192

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.037
Model:              OLS  Adj. R-squared:    0.030
Method:             Least Squares  F-statistic:    5.061
Date:              Wed, 30 Aug 2023  Prob (F-statistic):  0.00698
Time:              12:11:41  Log-Likelihood:  -751.87
No. Observations:   263  AIC:              1510.
Df Residuals:       260  BIC:              1520.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              9.4643    1.779    5.320  0.000    5.961   12.967
Current Account balance (% of GDP)  -0.0456    0.027   -1.704  0.090   -0.098    0.007
ln_GDP per capita (constant 2015 US$) -0.6208    0.226   -2.746  0.006   -1.066   -0.176
=====
```

```
=====
Omnibus:           134.132  Durbin-Watson:      1.978
Prob(Omnibus):      0.000  Jarque-Bera (JB):    578.976
Skew:               2.172  Prob(JB):           1.89e-126
Kurtosis:           8.828  Cond. No.           89.1
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.725459252965905
LM P-Value: 0.5895798471001887
F Statistic: 0.7385553747418546
F P-Value: 0.5951769697515986

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.092

Model:

OLS

Adj. R-squared:

0.054

Method:

Least Squares

F-statistic:

1.347

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.270

Time:

12:11:41

Log-Likelihood:

-120.96

No. Observations:

51

AIC:

247.9

Df Residuals:

48

BIC:

253.7

Df Model:

2

Covariance Type:

HC3

coef

std err

z

P>|z|

[0.025

0.975]

const

9.4999

4.642

2.046

0.041

0.402

18.598

Cyclically adjusted balance (% of potential GDP)

-0.1607

0.147

-1.093

0.274

-0.449

0.127

ln_GDP per capita (constant 2015 US\$)

-0.7053

0.512

-1.378

0.168

-1.708

0.298

Omnibus:

21.480

Durbin-Watson:

1.309

Prob(Omnibus):

0.000

Jarque-Bera (JB):

29.069

Skew:

1.541

Prob(JB):

4.87e-07

Kurtosis:

5.044

Cond. No.

111.

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 11.30935891914223
LM P-Value: 0.0455798272073603
F Statistic: 2.564439059195976
F P-Value: 0.039982395375448704

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|--------|-------|--|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.150 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.115 | | | | | | |
| Method: | Least Squares | F-statistic: | 2.299 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.111 | | | | | | |
| Time: | 12:11:42 | Log-Likelihood: | -119.25 | | | | | | |
| No. Observations: | 51 | AIC: | 244.5 | | | | | | |
| Df Residuals: | 48 | BIC: | 250.3 | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | HC3 | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | z | P> z | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 9.8971 | 4.525 | 2.187 | 0.029 | 1.028 | 18.767 | | |
| Cyclically adjusted primary balance (% of potential GDP) | | -0.2575 | | 0.140 | -1.835 | 0.066 | -0.532 | 0.017 | |
| ln_GDP per capita (constant 2015 US\$) | | -0.7282 | | 0.498 | -1.462 | 0.144 | -1.704 | 0.248 | |
| ===== | | | | | | | | | |
| Omnibus: | 19.265 | Durbin-Watson: | 1.191 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 24.306 | | | | | | |
| Skew: | 1.441 | Prob(JB): | 5.27e-06 | | | | | | |
| Kurtosis: | 4.769 | Cond. No. | 103. | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 12.067859577812367
LM P-Value: 0.03386968597621831
F Statistic: 2.7897447975507004
F P-Value: 0.02808078248076274

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|---|------------------|---------------------|----------|--------|-------|--------|--------|--|--|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.024 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.015 | | | | | | |
| Method: | Least Squares | F-statistic: | 2.825 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0614 | | | | | | |
| Time: | 12:11:42 | Log-Likelihood: | -690.35 | | | | | | |
| No. Observations: | 236 | AIC: | 1387. | | | | | | |
| Df Residuals: | 233 | BIC: | 1397. | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | nonrobust | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | t | P> t | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 9.0849 | 2.908 | 3.125 | 0.002 | 3.356 | 14.813 | | |
| ln_Debt service on external debt, total (TDS, current US\$) | | 0.0982 | 0.142 | 0.693 | 0.489 | -0.181 | 0.377 | | |
| ln_GDP per capita (constant 2015 US\$) | | -0.7799 | 0.329 | -2.370 | 0.019 | -1.428 | -0.132 | | |
| ===== | | | | | | | | | |
| Omnibus: | 114.869 | Durbin-Watson: | 2.099 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 421.260 | | | | | | |
| Skew: | 2.098 | Prob(JB): | 3.35e-92 | | | | | | |
| Kurtosis: | 8.023 | Cond. No. | 202. | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.151230801511383
LM P-Value: 0.6766834637149429
F Statistic: 0.6225354652656869
F P-Value: 0.6827399535899998

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|-----------|-------|--------|--------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.044 | | | | |
| Model: | OLS | Adj. R-squared: | 0.036 | | | | |
| Method: | Least Squares | F-statistic: | 5.298 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00563 | | | | |
| Time: | 12:11:43 | Log-Likelihood: | -666.15 | | | | |
| No. Observations: | 232 | AIC: | 1338. | | | | |
| Df Residuals: | 229 | BIC: | 1349. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 11.1974 | 2.092 | 5.352 | 0.000 | 7.075 | 15.320 | |
| Domestic credit to private sector (% of GDP) | 0.0047 | 0.010 | 0.455 | 0.650 | -0.016 | 0.025 | |
| ln_GDP per capita (constant 2015 US\$) | -0.8309 | 0.293 | -2.836 | 0.005 | -1.408 | -0.254 | |
| ===== | | | | | | | |
| Omnibus: | 123.334 | Durbin-Watson: | 1.984 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 541.291 | | | | |
| Skew: | 2.223 | Prob(JB): | 2.89e-118 | | | | |
| Kurtosis: | 9.019 | Cond. No. | 346. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.374875777531876
LM P-Value: 0.3718613190936053
F Statistic: 1.0720099370180696
F P-Value: 0.37666518977301816

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.034
Model:              OLS  Adj. R-squared:    0.027
Method:            Least Squares  F-statistic:    5.591
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00413
Time:              12:11:43  Log-Likelihood:    -876.41
No. Observations:    304  AIC:      1759.
Df Residuals:        301  BIC:      1770.
Df Model:            2
Covariance Type:      HC3
=====
```

```
=====
              coef  std err      z  P>|z|   [0.025   0.975]
-----
const              10.6281    2.033    5.229  0.000    6.644   14.612
Dummy for past default      -0.1674    0.545   -0.307  0.759   -1.236    0.901
ln_GDP per capita (constant 2015 US$)  -0.7042    0.229   -3.076  0.002   -1.153   -0.255
=====
```

```
=====
Omnibus:      137.461  Durbin-Watson:      2.002
Prob(Omnibus):    0.000  Jarque-Bera (JB):    496.752
Skew:           2.015  Prob(JB):      1.35e-108
Kurtosis:        7.793  Cond. No.      57.1
=====
```

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 8.689219226810478
LM P-Value: 0.06935471754919979
F Statistic: 2.1994426871362327
F P-Value: 0.06905977894441774

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.049 | | | | |
| Model: | OLS | Adj. R-squared: | 0.042 | | | | |
| Method: | Least Squares | F-statistic: | 6.629 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00156 | | | | |
| Time: | 12:11:43 | Log-Likelihood: | -758.05 | | | | |
| No. Observations: | 261 | AIC: | 1522. | | | | |
| Df Residuals: | 258 | BIC: | 1533. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 10.1220 | 1.957 | 5.172 | 0.000 | 6.268 | 13.976 | |
| Exports of goods and services (% of GDP) | -0.0316 | 0.015 | -2.052 | 0.041 | -0.062 | -0.001 | |
| ln_GDP per capita (constant 2015 US\$) | -0.5097 | 0.270 | -1.887 | 0.060 | -1.041 | 0.022 | |
| ===== | | | | | | | |
| Omnibus: | 119.326 | Durbin-Watson: | 2.070 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 417.279 | | | | |
| Skew: | 2.009 | Prob(JB): | 2.45e-91 | | | | |
| Kurtosis: | 7.715 | Cond. No. | 275. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.9798302343861085
LM P-Value: 0.30818647519358144
F Statistic: 1.195871456889027
F P-Value: 0.3116123079992001

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.024

Model:

OLS

Adj. R-squared:

0.014

Method:

Least Squares

F-statistic:

2.420

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0915

Time:

12:11:44

Log-Likelihood:

-580.74

No. Observations:

202

AIC:

1167.

Df Residuals:

199

BIC:

1177.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

8.8444

2.055

4.303

0.000

4.791

12.898

Exports of goods and services (annual % growth)

0.0178

0.017

1.032

0.303

-0.016

0.052

ln_GDP per capita (constant 2015 US\$)

-0.5099

0.263

-1.936

0.054

-1.029

0.010

Omnibus:

105.911

Durbin-Watson:

2.150

Prob(Omnibus):

0.000

Jarque-Bera (JB):

422.539

Skew:

2.172

Prob(JB):

1.77e-92

Kurtosis:

8.597

Cond. No.

129.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.740881561931986
LM P-Value: 0.4483144984026549
F Statistic: 0.9421240381649649
F P-Value: 0.4548255547160224

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.033

Model:

OLS

Adj. R-squared:

0.026

Method:

Least Squares

F-statistic:

4.454

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0125

Time:

12:11:44

Log-Likelihood:

-760.16

No. Observations:

261

AIC:

1526.

Df Residuals:

258

BIC:

1537.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

10.9404

2.048

5.342

0.000

6.907

14.974

External balance on goods and services (% of GDP)

0.0015

0.018

0.084

0.933

-0.034

0.037

ln_GDP per capita (constant 2015 US\$)

-0.7445

0.256

-2.913

0.004

-1.248

-0.241

=====

Omnibus:

120.023

Durbin-Watson:

2.055

Prob(Omnibus):

0.000

Jarque-Bera (JB):

416.522

Skew:

2.028

Prob(JB):

3.58e-91

Kurtosis:

7.674

Cond. No.

142.

=====

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.970326802359579
LM P-Value: 0.3091169678004243
F Statistic: 1.1939264286488362
F P-Value: 0.31255629284313446

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.024
Model:              OLS  Adj. R-squared:    0.016
Method:            Least Squares  F-statistic:    2.846
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.0601
Time:              12:11:45  Log-Likelihood:   -681.13
No. Observations:    233  AIC:              1368.
Df Residuals:        230  BIC:              1379.
Df Model:            2
Covariance Type:     nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              10.5467    2.394    4.405    0.000    5.829   15.264
External debt stocks (% of GNI)      0.0001    0.005    0.030    0.976   -0.009    0.010
ln_GDP per capita (constant 2015 US$) -0.7334    0.312   -2.350    0.020   -1.348   -0.118
=====
```

```
=====
Omnibus:           115.943  Durbin-Watson:      2.114
Prob(Omnibus):      0.000  Jarque-Bera (JB):    438.741
Skew:               2.132  Prob(JB):          5.35e-96
Kurtosis:           8.198  Cond. No.           736.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.9425849735100336
LM P-Value: 0.5577116354153278
F Statistic: 0.7814344616464605
F P-Value: 0.5639854547365075

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.003
Model:              OLS  Adj. R-squared:    -0.006
Method:            Least Squares  F-statistic:    0.3598
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.698
Time:              12:11:45  Log-Likelihood:    -577.55
No. Observations:    232  AIC:      1161.
Df Residuals:        229  BIC:      1171.
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|    [0.025    0.975]
-----
const              5.4113    1.671    3.239    0.001    2.119    8.703
Food Price Index   -0.0072    0.013   -0.571    0.569   -0.032    0.018
ln_GDP per capita (constant 2015 US$) -0.0983    0.170   -0.579    0.563   -0.433    0.236
=====
```

```
=====
Omnibus:      87.799  Durbin-Watson:      1.614
Prob(Omnibus):    0.000  Jarque-Bera (JB):      216.648
Skew:           1.773  Prob(JB):      9.03e-48
Kurtosis:        6.136  Cond. No.      778.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.657484272668538
LM P-Value: 0.34098594100994517
F Statistic: 1.1297846023443252
F P-Value: 0.3453572833536214

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|-------|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.015 | | | | |
| Model: | OLS | Adj. R-squared: | 0.006 | | | | |
| Method: | Least Squares | F-statistic: | 1.679 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.189 | | | | |
| Time: | 12:11:46 | Log-Likelihood: | -541.51 | | | | |
| No. Observations: | 220 | AIC: | 1089. | | | | |
| Df Residuals: | 217 | BIC: | 1099. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 4.7699 | 1.319 | 3.617 | 0.000 | 2.171 | 7.369 | |
| Food Price Index (% change) | | 3.3778 | 1.973 | 1.712 | 0.088 | -0.511 | 7.267 |
| ln_GDP per capita (constant 2015 US\$) | -0.1219 | 0.168 | -0.727 | 0.468 | -0.453 | 0.209 | |
| ===== | | | | | | | |
| Omnibus: | 98.159 | Durbin-Watson: | 1.572 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 308.050 | | | | |
| Skew: | 1.950 | Prob(JB): | 1.28e-67 | | | | |
| Kurtosis: | 7.288 | Cond. No. | 81.3 | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.982532574567367
LM P-Value: 0.7026789464010215
F Statistic: 0.5882125328706325
F P-Value: 0.7090150230892356

Regression Summary:

| OLS Regression Results | | | | | | | |
|---|------------------|---------------------|-----------|-------|--------|--------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.039 | | | | |
| Model: | OLS | Adj. R-squared: | 0.033 | | | | |
| Method: | Least Squares | F-statistic: | 5.907 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00306 | | | | |
| Time: | 12:11:46 | Log-Likelihood: | -839.47 | | | | |
| No. Observations: | 292 | AIC: | 1685. | | | | |
| Df Residuals: | 289 | BIC: | 1696. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 10.1504 | 1.707 | 5.946 | 0.000 | 6.791 | 13.510 | |
| Foreign direct investment, net inflows (% of GDP) | -0.0306 | 0.029 | -1.057 | 0.292 | -0.088 | 0.026 | |
| ln_GDP per capita (constant 2015 US\$) | -0.6507 | 0.221 | -2.938 | 0.004 | -1.087 | -0.215 | |
| ===== | | | | | | | |
| Omnibus: | 141.039 | Durbin-Watson: | 2.032 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 557.368 | | | | |
| Skew: | 2.117 | Prob(JB): | 9.31e-122 | | | | |
| Kurtosis: | 8.280 | Cond. No. | 75.5 | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 7.775454072476778
LM P-Value: 0.16905271115227472
F Statistic: 1.5648049379207547
F P-Value: 0.17001377481122693

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.034
Model:              OLS  Adj. R-squared:    0.027
Method:            Least Squares  F-statistic:    5.266
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00565
Time:              12:11:46  Log-Likelihood:    -876.42
No. Observations:    304  AIC:      1759.
Df Residuals:        301  BIC:      1770.
Df Model:            2
Covariance Type:     nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const          11.2336    3.269    3.437   0.001    4.801   17.666
ln_GDP (constant 2015 US$)  -0.0402    0.142   -0.284   0.777   -0.319    0.238
ln_GDP per capita (constant 2015 US$) -0.6768    0.222   -3.048   0.003   -1.114   -0.240
=====
```

```
=====
Omnibus:          137.025  Durbin-Watson:      1.996
Prob(Omnibus):     0.000  Jarque-Bera (JB):    492.769
Skew:              2.010  Prob(JB):      9.92e-108
Kurtosis:          7.768  Cond. No.      319.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.476637657663094
LM P-Value: 0.48301531174144396
F Statistic: 0.8907739359969389
F P-Value: 0.48753287688448466

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.050
Model:              OLS  Adj. R-squared:    0.043
Method:             Least Squares  F-statistic:    7.694
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  0.000553
Time:               12:11:47  Log-Likelihood: -855.37
No. Observations:   297  AIC:              1717.
Df Residuals:       294  BIC:              1728.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const          11.0980    1.710    6.491  0.000    7.733   14.463
GDP growth (annual %) -0.1106    0.050   -2.224  0.027   -0.208   -0.013
ln_GDP per capita (constant 2015 US$) -0.7181    0.216   -3.328  0.001   -1.143   -0.293
=====
```

```
=====
Omnibus:         136.301  Durbin-Watson:      2.025
Prob(Omnibus):    0.000  Jarque-Bera (JB):    496.794
Skew:             2.039  Prob(JB):             1.33e-108
Kurtosis:         7.849  Cond. No.              64.1
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.34348571826423
LM P-Value: 0.3754135171571739
F Statistic: 1.0662915229884593
F P-Value: 0.3791905271874487

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.038
Model:              OLS  Adj. R-squared:    0.031
Method:             Least Squares  F-statistic:    5.907
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  0.00305
Time:               12:11:47  Log-Likelihood: -875.80
No. Observations:   304  AIC:              1758.
Df Residuals:       301  BIC:              1769.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              11.4366    1.884    6.069   0.000    7.728   15.145
GDP growth China (annual %)   -0.1050    0.091   -1.149   0.252   -0.285    0.075
ln_GDP per capita (constant 2015 US$) -0.6897    0.214   -3.223   0.001   -1.111   -0.269
=====
```

```
=====
Omnibus:           136.676  Durbin-Watson:      2.014
Prob(Omnibus):      0.000  Jarque-Bera (JB):    494.264
Skew:               2.001  Prob(JB):           4.70e-108
Kurtosis:           7.797  Cond. No.           96.8
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.032433608786141
LM P-Value: 0.41193479164787117
F Statistic: 1.0032293693396084
F P-Value: 0.4159592323211835

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.036
Model:              OLS  Adj. R-squared:    0.030
Method:            Least Squares  F-statistic:    5.611
Date:              Wed, 30 Aug 2023  Prob (F-statistic):  0.00405
Time:              12:11:48  Log-Likelihood:  -876.08
No. Observations:   304  AIC:              1758.
Df Residuals:       301  BIC:              1769.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|   [0.025   0.975]
-----
const          10.1287    1.711    5.920   0.000    6.762   13.495
GDP growth USA (annual %)      0.1201    0.139    0.865   0.388   -0.153    0.393
ln_GDP per capita (constant 2015 US$) -0.6921    0.214   -3.231   0.001   -1.114   -0.271
=====
```

```
=====
Omnibus:         136.001  Durbin-Watson:      1.971
Prob(Omnibus):    0.000  Jarque-Bera (JB):    485.448
Skew:             1.997  Prob(JB):           3.86e-106
Kurtosis:         7.731  Cond. No.           57.3
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.455870414310965
LM P-Value: 0.26435168509666707
F Statistic: 1.2931523039244632
F P-Value: 0.26671017777720835

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|---|------------------|---------------------|----------|---------|-------|--------|--------|--------|--------|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.040 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.032 | | | | | | |
| Method: | Least Squares | F-statistic: | 5.144 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00648 | | | | | | |
| Time: | 12:11:48 | Log-Likelihood: | -725.72 | | | | | | |
| No. Observations: | 248 | AIC: | 1457. | | | | | | |
| Df Residuals: | 245 | BIC: | 1468. | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | nonrobust | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | t | P> t | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 11.0939 | 1.995 | 5.561 | 0.000 | 7.164 | 15.024 | | |
| General government final consumption expenditure (% of GDP) | | | | 0.0495 | 0.052 | 0.952 | 0.342 | -0.053 | 0.152 |
| ln_GDP per capita (constant 2015 US\$) | | | | -0.8508 | 0.265 | -3.207 | 0.002 | -1.373 | -0.328 |
| ===== | | | | | | | | | |
| Omnibus: | 109.418 | Durbin-Watson: | 2.092 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 352.587 | | | | | | |
| Skew: | 1.955 | Prob(JB): | 2.73e-77 | | | | | | |
| Kurtosis: | 7.340 | Cond. No. | 123. | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.949582905266951
LM P-Value: 0.22441697815159456
F Statistic: 1.3953919543840945
F P-Value: 0.22660442823465227

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.026

Model:

OLS

Adj. R-squared:

0.015

Method:

Least Squares

F-statistic:

2.121

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.123

Time:

12:11:48

Log-Likelihood:

-539.87

No. Observations:

186

AIC:

1086.

Df Residuals:

183

BIC:

1095.

Df Model:

2

Covariance Type:

HC3

coef

std err

z

P>|z|

[0.025

0.975]

const

9.4302

2.265

4.163

0.000

4.990

13.870

General government final consumption expenditure (annual % growth)

0.0234

0.062

0.379

0.705

-0.098

0.144

ln_GDP per capita (constant 2015 US\$)

-0.5690

0.279

-2.038

0.042

-1.116

-0.022

Omnibus:

93.298

Durbin-Watson:

2.166

Prob(Omnibus):

0.000

Jarque-Bera (JB):

329.835

Skew:

2.086

Prob(JB):

2.38e-72

Kurtosis:

8.016

Cond. No.

79.1

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 9.880125552282706
LM P-Value: 0.07870396942878655
F Statistic: 2.0195592405317417
F P-Value: 0.0779440382098636

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.006
Model:              OLS  Adj. R-squared:    -0.006
Method:             Least Squares  F-statistic:    0.4827
Date:               Wed, 30 Aug 2023  Prob (F-statistic):    0.618
Time:               12:11:49  Log-Likelihood:    -404.62
No. Observations:   163  AIC:      815.2
Df Residuals:       160  BIC:      824.5
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              5.5697    2.346    2.374  0.019    0.936   10.203
Government Effectiveness      0.4433    0.452    0.981  0.328   -0.449    1.336
ln_GDP per capita (constant 2015 US$) -0.1916    0.279   -0.686  0.494   -0.743    0.360
=====
```

```
=====
Omnibus:      80.907  Durbin-Watson:      1.296
Prob(Omnibus):    0.000  Jarque-Bera (JB):    256.986
Skew:           2.057  Prob(JB):      1.57e-56
Kurtosis:        7.573  Cond. No.      83.3
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.153380131498456
LM P-Value: 0.5275511037700947
F Statistic: 0.8210192715275544
F P-Value: 0.5364132902909893

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.038
Model:              OLS  Adj. R-squared:    0.030
Method:             Least Squares  F-statistic:    4.914
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00806
Time:              12:11:49  Log-Likelihood:    -742.24
No. Observations:    254  AIC:      1490.
Df Residuals:        251  BIC:      1501.
Df Model:            2
Covariance Type:     nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              11.1843    1.962    5.700   0.000    7.320   15.049
Gross capital formation (% of GDP)  -0.0258    0.031   -0.832   0.406   -0.087    0.035
ln_GDP per capita (constant 2015 US$) -0.6901    0.263   -2.626   0.009   -1.208   -0.173
=====
```

```
=====
Omnibus:          112.822  Durbin-Watson:      2.100
Prob(Omnibus):    0.000  Jarque-Bera (JB):    367.395
Skew:             1.973  Prob(JB):      1.66e-80
Kurtosis:         7.375  Cond. No.      187.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.366215840058223
LM P-Value: 0.37283885337371564
F Statistic: 1.0705073993310112
F P-Value: 0.37723292176399653

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.002
Model:              OLS  Adj. R-squared:    -0.010
Method:             Least Squares  F-statistic:    0.03968
Date:               Wed, 30 Aug 2023  Prob (F-statistic):    0.961
Time:               12:11:50  Log-Likelihood:    -418.84
No. Observations:   172  AIC:      843.7
Df Residuals:       169  BIC:      853.1
Df Model:           2
Covariance Type:    HC3
=====
```

```
=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
const              3.5014   1.613   2.170   0.030   0.340   6.663
Gross debt (% of GDP)      0.0023   0.008   0.279   0.780  -0.014   0.019
ln_GDP per capita (constant 2015 US$)  0.0226   0.183   0.123   0.902  -0.337   0.382
=====
```

```
=====
Omnibus:           86.263  Durbin-Watson:      1.779
Prob(Omnibus):     0.000  Jarque-Bera (JB):    293.590
Skew:              2.067  Prob(JB):      1.77e-64
Kurtosis:          7.885  Cond. No.      502.
=====
```

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 17.038537774306167
LM P-Value: 0.00442728597246194
F Statistic: 3.650452480133933
F P-Value: 0.003687393216630937

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.038
Model:              OLS  Adj. R-squared:    0.031
Method:             Least Squares  F-statistic:    4.939
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00788
Time:              12:11:50  Log-Likelihood:    -724.99
No. Observations:    250  AIC:      1456.
Df Residuals:        247  BIC:      1467.
Df Model:             2
Covariance Type:     nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              11.3328    2.002   5.661  0.000   7.390  15.276
Gross domestic savings (% of GDP)    0.0048    0.018   0.267  0.790  -0.031   0.041
ln_GDP per capita (constant 2015 US$) -0.8021    0.266  -3.010  0.003  -1.327  -0.277
=====
```

```
=====
Omnibus:           114.021  Durbin-Watson:      2.043
Prob(Omnibus):      0.000  Jarque-Bera (JB):    392.700
Skew:               1.996  Prob(JB):      5.32e-86
Kurtosis:           7.665  Cond. No.      168.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.249080474456102
LM P-Value: 0.38624448853846227
F Statistic: 1.0465951574360628
F P-Value: 0.39086908641556284

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.040
Model:              OLS  Adj. R-squared:    0.032
Method:             Least Squares  F-statistic:    5.095
Date:              Wed, 30 Aug 2023  Prob (F-statistic):  0.00680
Time:              12:11:50  Log-Likelihood:  -718.82
No. Observations:   248  AIC:              1444.
Df Residuals:       245  BIC:              1454.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|    [0.025    0.975]
-----
const              12.4317    3.189    3.898    0.000    6.151    18.713
Gross national expenditure (% of GDP)  -0.0091    0.019   -0.470    0.638   -0.047    0.029
ln_GDP per capita (constant 2015 US$) -0.8106    0.255   -3.184    0.002   -1.312   -0.309
=====
```

```
=====
Omnibus:           114.585  Durbin-Watson:      2.063
Prob(Omnibus):      0.000  Jarque-Bera (JB):    401.302
Skew:               2.014  Prob(JB):           7.22e-88
Kurtosis:           7.755  Cond. No.           1.25e+03
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 1.25e+03. This might indicate that there are strong multicollinearity or other numerical problems.

White Test Results:

LM Statistic: 6.603267418428874
LM P-Value: 0.2518565417685464
F Statistic: 1.323953889657397
F P-Value: 0.2545377187599024

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.046 | | | | |
| Model: | OLS | Adj. R-squared: | 0.038 | | | | |
| Method: | Least Squares | F-statistic: | 6.182 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00239 | | | | |
| Time: | 12:11:51 | Log-Likelihood: | -758.48 | | | | |
| No. Observations: | 261 | AIC: | 1523. | | | | |
| Df Residuals: | 258 | BIC: | 1534. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 11.1854 | 1.932 | 5.791 | 0.000 | 7.382 | 14.989 | |
| Imports of goods and services (% of GDP) | -0.0243 | 0.013 | -1.830 | 0.068 | -0.050 | 0.002 | |
| ln_GDP per capita (constant 2015 US\$) | -0.6459 | 0.251 | -2.569 | 0.011 | -1.141 | -0.151 | |
| ===== | | | | | | | |
| Omnibus: | 120.210 | Durbin-Watson: | 2.054 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 423.471 | | | | |
| Skew: | 2.023 | Prob(JB): | 1.11e-92 | | | | |
| Kurtosis: | 7.751 | Cond. No. | 337. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.122944412590235
LM P-Value: 0.2944390864792979
F Statistic: 1.225179584417353
F P-Value: 0.2976614797138334

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.020

Model:

OLS

Adj. R-squared:

0.010

Method:

Least Squares

F-statistic:

2.013

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.136

Time:

12:11:51

Log-Likelihood:

-581.14

No. Observations:

202

AIC:

1168.

Df Residuals:

199

BIC:

1178.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

8.9219

2.058

4.335

0.000

4.863

12.981

Imports of goods and services (annual % growth)

0.0108

0.021

0.515

0.607

-0.031

0.052

ln_GDP per capita (constant 2015 US\$)

-0.5146

0.264

-1.949

0.053

-1.035

0.006

Omnibus:

105.505

Durbin-Watson:

2.159

Prob(Omnibus):

0.000

Jarque-Bera (JB):

413.417

Skew:

2.173

Prob(JB):

1.69e-90

Kurtosis:

8.499

Cond. No.

111.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.076552685451893
LM P-Value: 0.538447767405035
F Statistic: 0.8073872370247899
F P-Value: 0.5456265264916985

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.049
Model:              OLS  Adj. R-squared:    0.041
Method:             Least Squares  F-statistic:    6.517
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  0.00174
Time:               12:11:52  Log-Likelihood:   -734.64
No. Observations:   257  AIC:               1475.
Df Residuals:       254  BIC:               1486.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              9.0635    1.815    4.994    0.000    5.489   12.638
Inflation, consumer prices (annual %)  0.0523    0.024    2.211    0.028    0.006    0.099
ln_GDP per capita (constant 2015 US$) -0.6077    0.227   -2.680    0.008   -1.054   -0.161
=====
```

```
=====
Omnibus:           136.856  Durbin-Watson:      1.984
Prob(Omnibus):      0.000  Jarque-Bera (JB):    633.705
Skew:               2.243  Prob(JB):           2.47e-138
Kurtosis:           9.249  Cond. No.           108.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.358527068259555
LM P-Value: 0.2728787133535392
F Statistic: 1.273524509304015
F P-Value: 0.27581257929267844

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.011
Model:              OLS  Adj. R-squared:    -0.006
Method:             Least Squares  F-statistic:    0.6605
Date:               Wed, 30 Aug 2023  Prob (F-statistic):    0.518
Time:               12:11:52  Log-Likelihood:    -312.24
No. Observations:   122  AIC:              630.5
Df Residuals:       119  BIC:              638.9
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const                2.8900    2.037    1.419    0.159   -1.143    6.923
Interest payments (% of revenue)    0.0316    0.032    0.975    0.332   -0.033    0.096
ln_GDP per capita (constant 2015 US$)  0.1030    0.253    0.408    0.684   -0.397    0.603
=====
```

```
=====
Omnibus:             74.856  Durbin-Watson:      1.740
Prob(Omnibus):       0.000  Jarque-Bera (JB):    298.840
Skew:                2.287  Prob(JB):           1.28e-65
Kurtosis:            9.154  Cond. No.           104.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 6.625509597840021
LM P-Value: 0.25001405300711155
F Statistic: 1.3322860377029302
F P-Value: 0.25546174954788775

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.059
Model:              OLS  Adj. R-squared:    0.022
Method:             Least Squares  F-statistic:    1.619
Date:               Wed, 30 Aug 2023  Prob (F-statistic):    0.208
Time:               12:11:52  Log-Likelihood:    -124.72
No. Observations:   55  AIC:      255.4
Df Residuals:       52  BIC:      261.5
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t  P>|t|  [0.025  0.975]
-----
const                6.7716    2.150    3.150  0.003    2.458   11.086
Net debt (% of GDP)   -0.0067    0.005   -1.217  0.229   -0.018    0.004
ln_GDP per capita (constant 2015 US$) -0.3765    0.253   -1.489  0.143   -0.884    0.131
=====
```

```
=====
Omnibus:      32.337  Durbin-Watson:      1.865
Prob(Omnibus): 0.000  Jarque-Bera (JB):      63.653
Skew:          1.908  Prob(JB):      1.51e-14
Kurtosis:      6.636  Cond. No.      502.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.533354878440583
LM P-Value: 0.35430225872611126
F Statistic: 1.0962311609259232
F P-Value: 0.3745038634831608

Regression Summary:

OLS Regression Results

=====

| | | | |
|-------------------|------------------|---------------------|---------|
| Dep. Variable: | length_db | R-squared: | 0.010 |
| Model: | OLS | Adj. R-squared: | -0.001 |
| Method: | Least Squares | F-statistic: | 0.4802 |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.619 |
| Time: | 12:11:53 | Log-Likelihood: | -450.85 |
| No. Observations: | 186 | AIC: | 907.7 |
| Df Residuals: | 183 | BIC: | 917.4 |
| Df Model: | 2 | | |
| Covariance Type: | HC3 | | |

=====

| | coef | std err | z | P> z | [0.025 | 0.975] | | |
|--|---------|-------------------|----------|--------|--------|--------|-------|--|
| ----- | | | | | | | | |
| const | 4.0661 | 1.286 | 3.161 | 0.002 | 1.545 | 6.588 | | |
| Net lending/borrowing (overall balance) (% of GDP) | -0.0463 | | 0.063 | -0.732 | 0.464 | -0.170 | 0.078 | |
| ln_GDP per capita (constant 2015 US\$) | -0.0408 | | 0.156 | -0.262 | 0.794 | -0.346 | 0.264 | |
| ===== | | | | | | | | |
| Omnibus: | 83.936 | Durbin-Watson: | 1.641 | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 252.083 | | | | | |
| Skew: | 1.931 | Prob(JB): | 1.82e-55 | | | | | |
| Kurtosis: | 7.197 | Cond. No. | 58.1 | | | | | |
| ===== | | | | | | | | |

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 26.396704181953258
LM P-Value: 7.473763493739876e-05
F Statistic: 5.95402084699849
F P-Value: 4.0260541301350664e-05

Regression Summary:

| OLS Regression Results | | | | | | | |
|---|------------------|---------------------|---------|-------|----------|---------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.967 | | | | |
| Model: | OLS | Adj. R-squared: | 0.901 | | | | |
| Method: | Least Squares | F-statistic: | 14.65 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.182 | | | | |
| Time: | 12:11:53 | Log-Likelihood: | -4.7155 | | | | |
| No. Observations: | 4 | AIC: | 15.43 | | | | |
| Df Residuals: | 1 | BIC: | 13.59 | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | -85.2643 | 25.263 | -3.375 | 0.183 | -406.256 | 235.727 | |
| ln_Net official aid received (current US\$) | 6.2519 | 1.219 | 5.127 | 0.123 | -9.242 | 21.746 | |
| ln_GDP per capita (constant 2015 US\$) | -3.0813 | 1.530 | -2.015 | 0.293 | -22.516 | 16.353 | |
| ===== | | | | | | | |
| Omnibus: | nan | Durbin-Watson: | 1.896 | | | | |
| Prob(Omnibus): | nan | Jarque-Bera (JB): | 0.466 | | | | |
| Skew: | 0.469 | Prob(JB): | 0.792 | | | | |
| Kurtosis: | 1.615 | Cond. No. | 652. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.0
LM P-Value: 0.26146412994911117
F Statistic: nan
F P-Value: nan

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:          0.050
Model:              OLS  Adj. R-squared:      0.043
Method:             Least Squares  F-statistic:      7.397
Date:               Wed, 30 Aug 2023  Prob (F-statistic):  0.000739
Time:               12:11:54  Log-Likelihood:    -815.25
No. Observations:   286  AIC:                  1637.
Df Residuals:       283  BIC:                  1647.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              10.4524    1.659    6.299    0.000    7.186   13.719
Official Exchange Rate (annual %)      0.0045    0.003    1.371    0.172   -0.002    0.011
ln_GDP per capita (constant 2015 US$)  -0.7313    0.212   -3.450    0.001   -1.149   -0.314
=====
```

```
=====
Omnibus:           149.387  Durbin-Watson:          2.025
Prob(Omnibus):     0.000  Jarque-Bera (JB):        681.894
Skew:              2.241  Prob(JB):             8.48e-149
Kurtosis:          9.094  Cond. No.              517.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 8.45987756941704
LM P-Value: 0.13264612160483638
F Statistic: 1.7069717334503507
F P-Value: 0.13301227223759982

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|-----------|--------|--------|--------|--------|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.045 | | | | |
| Model: | OLS | Adj. R-squared: | 0.038 | | | | |
| Method: | Least Squares | F-statistic: | 6.368 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00197 | | | | |
| Time: | 12:11:54 | Log-Likelihood: | -832.29 | | | | |
| No. Observations: | 290 | AIC: | 1671. | | | | |
| Df Residuals: | 287 | BIC: | 1682. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | HC3 | | | | | | |
| ===== | | | | | | | |
| | coef | std err | z | P> z | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 11.3439 | 1.949 | 5.821 | 0.000 | 7.524 | 15.164 | |
| ln_Official exchange rate (LCU per US\$, period average) | -0.0956 | | 0.124 | -0.772 | 0.440 | -0.338 | 0.147 |
| ln_GDP per capita (constant 2015 US\$) | -0.7964 | | 0.224 | -3.560 | 0.000 | -1.235 | -0.358 |
| ===== | | | | | | | |
| Omnibus: | 142.407 | Durbin-Watson: | 1.972 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 586.466 | | | | |
| Skew: | 2.134 | Prob(JB): | 4.47e-128 | | | | |
| Kurtosis: | 8.506 | Cond. No. | 58.5 | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 13.839295276640817
LM P-Value: 0.016663111331985832
F Statistic: 2.8464294820678337
F P-Value: 0.015866025425367723

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.034
Model:              OLS  Adj. R-squared:    0.027
Method:            Least Squares  F-statistic:    5.230
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00585
Time:              12:11:54  Log-Likelihood:    -876.46
No. Observations:    304  AIC:      1759.
Df Residuals:        301  BIC:      1770.
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
               coef  std err      t    P>|t|    [0.025    0.975]
-----
const                10.4775    1.720    6.091    0.000    7.093    13.862
Oil price             -0.0007    0.007   -0.103    0.918   -0.014    0.013
ln_GDP per capita (constant 2015 US$) -0.6916    0.215   -3.216    0.001   -1.115   -0.268
=====
```

```
=====
Omnibus:      137.216  Durbin-Watson:      1.994
Prob(Omnibus):    0.000  Jarque-Bera (JB):    495.044
Skew:           2.012  Prob(JB):      3.18e-108
Kurtosis:        7.784  Cond. No.      573.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.2993047820476935
LM P-Value: 0.38045473558264437
F Statistic: 1.0573747234822672
F P-Value: 0.38419330488927106

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.051
Model:              OLS  Adj. R-squared:    0.045
Method:            Least Squares  F-statistic:    6.925
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00115
Time:              12:11:55  Log-Likelihood:    -873.66
No. Observations:    304  AIC:      1753.
Df Residuals:        301  BIC:      1764.
Df Model:            2
Covariance Type:      HC3
=====
```

```
=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
const          10.7368   1.761   6.097   0.000   7.285  14.188
Oil price (% change)    -2.4280   1.097  -2.213   0.027  -4.578  -0.278
ln_GDP per capita (constant 2015 US$)  -0.7223   0.215  -3.356   0.001  -1.144  -0.300
=====
```

```
=====
Omnibus:      127.542  Durbin-Watson:      2.022
Prob(Omnibus):    0.000  Jarque-Bera (JB):    412.484
Skew:           1.905  Prob(JB):      2.69e-90
Kurtosis:        7.249  Cond. No.      53.6
=====
```

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 13.30903573739883
LM P-Value: 0.020648627032362248
F Statistic: 2.7287347302353733
F P-Value: 0.0198464632554543

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|--|------------------|---------------------|----------|---------|-------|--------|--------|--------|-------|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.000 | | | | | | |
| Model: | OLS | Adj. R-squared: | -0.011 | | | | | | |
| Method: | Least Squares | F-statistic: | 0.01185 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.988 | | | | | | |
| Time: | 12:11:55 | Log-Likelihood: | -443.27 | | | | | | |
| No. Observations: | 182 | AIC: | 892.5 | | | | | | |
| Df Residuals: | 179 | BIC: | 902.2 | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | HC3 | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | z | P> z | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 3.9194 | 1.333 | 2.939 | 0.003 | 1.306 | 6.533 | | |
| Primary net lending/borrowing (primary balance) (% of GDP) | | | | -0.0070 | 0.057 | -0.123 | 0.902 | -0.119 | 0.105 |
| ln_GDP per capita (constant 2015 US\$) | | | | -0.0048 | 0.171 | -0.028 | 0.978 | -0.340 | 0.331 |
| ===== | | | | | | | | | |
| Omnibus: | 85.690 | Durbin-Watson: | 1.581 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 276.059 | | | | | | |
| Skew: | 1.975 | Prob(JB): | 1.13e-60 | | | | | | |
| Kurtosis: | 7.561 | Cond. No. | 53.6 | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 11.426152622685532
LM P-Value: 0.04355553076436403
F Statistic: 2.3579263673923654
F P-Value: 0.04218856975578996

Regression Summary:

| OLS Regression Results | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|
| ===== | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.012 | | | |
| Model: | OLS | Adj. R-squared: | 0.001 | | | |
| Method: | Least Squares | F-statistic: | 1.048 | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.353 | | | |
| Time: | 12:11:55 | Log-Likelihood: | -437.35 | | | |
| No. Observations: | 175 | AIC: | 880.7 | | | |
| Df Residuals: | 172 | BIC: | 890.2 | | | |
| Df Model: | 2 | | | | | |
| Covariance Type: | nonrobust | | | | | |
| ===== | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] |
| ----- | | | | | | |
| const | 5.9056 | 1.539 | 3.837 | 0.000 | 2.868 | 8.944 |
| Real interest rate (%) | -0.0190 | 0.021 | -0.926 | 0.356 | -0.060 | 0.021 |
| ln_GDP per capita (constant 2015 US\$) | -0.2151 | 0.196 | -1.097 | 0.274 | -0.602 | 0.172 |
| ===== | | | | | | |
| Omnibus: | 79.378 | Durbin-Watson: | 1.795 | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 233.043 | | | |
| Skew: | 1.928 | Prob(JB): | 2.48e-51 | | | |
| Kurtosis: | 7.134 | Cond. No. | 99.9 | | | |
| ===== | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.569114059009848
LM P-Value: 0.6129565661704252
F Statistic: 0.703700821076421
F P-Value: 0.6214021797980012

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.141
Model:              OLS  Adj. R-squared:    0.135
Method:            Least Squares  F-statistic:    20.19
Date:              Wed, 30 Aug 2023  Prob (F-statistic):  5.93e-09
Time:              12:11:56  Log-Likelihood:  -858.54
No. Observations:   304  AIC:              1723.
Df Residuals:       301  BIC:              1734.
Df Model:           2
Covariance Type:    HC3
=====
```

| | coef | std err | z | P> z | [0.025 | 0.975] |
|--|---------|---------|--------|-------|--------|--------|
| const | 6.8096 | 1.559 | 4.367 | 0.000 | 3.753 | 9.866 |
| Real interest rate USA (%) | 0.6931 | 0.114 | 6.062 | 0.000 | 0.469 | 0.917 |
| ln_GDP per capita (constant 2015 US\$) | -0.6507 | 0.203 | -3.209 | 0.001 | -1.048 | -0.253 |

```
=====
Omnibus:           120.350  Durbin-Watson:      1.928
Prob(Omnibus):     0.000  Jarque-Bera (JB):    391.649
Skew:              1.774  Prob(JB):            9.00e-86
Kurtosis:          7.281  Cond. No.            66.8
=====
```

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 23.51599990892977
LM P-Value: 0.0002688929801503263
F Statistic: 4.996911032776005
F P-Value: 0.00020661247615209142

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.000
Model:              OLS  Adj. R-squared:    -0.011
Method:             Least Squares  F-statistic:    0.01100
Date:               Wed, 30 Aug 2023  Prob (F-statistic):    0.989
Time:               12:11:56  Log-Likelihood:    -458.07
No. Observations:   189  AIC:      922.1
Df Residuals:       186  BIC:      931.9
Df Model:            2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t  P>|t|  [0.025  0.975]
-----
const              3.9670    1.365    2.906  0.004    1.274    6.660
Revenue (% of GDP)      0.0027    0.021    0.125  0.901   -0.039    0.045
ln_GDP per capita (constant 2015 US$) -0.0248    0.193   -0.129  0.898   -0.405    0.355
=====
```

```
=====
Omnibus:           91.548  Durbin-Watson:      1.662
Prob(Omnibus):     0.000  Jarque-Bera (JB):    313.672
Skew:              2.024  Prob(JB):      7.71e-69
Kurtosis:          7.841  Cond. No.      187.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 2.9787782555936237
LM P-Value: 0.7032577703526484
F Statistic: 0.586079819992391
F P-Value: 0.7106372364162457

Regression Summary:

OLS Regression Results

Dep. Variable:

length_db

R-squared:

0.024

Model:

OLS

Adj. R-squared:

0.016

Method:

Least Squares

F-statistic:

2.880

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

0.0581

Time:

12:11:57

Log-Likelihood:

-690.30

No. Observations:

236

AIC:

1387.

Df Residuals:

233

BIC:

1397.

Df Model:

2

Covariance Type:

nonrobust

coef

std err

t

P>|t|

[0.025

0.975]

const

10.7381

2.346

4.577

0.000

6.116

15.360

Short-term debt (% of total external debt)

0.0201

0.026

0.767

0.444

-0.032

0.072

ln_GDP per capita (constant 2015 US\$)

-0.7827

0.326

-2.399

0.017

-1.426

-0.140

Omnibus:

114.974

Durbin-Watson:

2.111

Prob(Omnibus):

0.000

Jarque-Bera (JB):

423.059

Skew:

2.098

Prob(JB):

1.36e-92

Kurtosis:

8.041

Cond. No.

138.

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.318670069810608
LM P-Value: 0.37823910016409384
F Statistic: 1.0605922173473161
F P-Value: 0.3830421989568694

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.016
Model:              OLS  Adj. R-squared:    0.007
Method:            Least Squares  F-statistic:    1.690
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.187
Time:              12:11:57  Log-Likelihood:   -586.32
No. Observations:    206  AIC:      1179.
Df Residuals:        203  BIC:      1189.
Df Model:            2
Covariance Type:     nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|    [0.025    0.975]
-----
const              7.9547    2.301    3.457    0.001    3.418   12.491
Short-term debt (% of total reserves)    0.0006    0.001    1.146    0.253   -0.000    0.002
ln_GDP per capita (constant 2015 US$)  -0.4264    0.305   -1.400    0.163   -1.027    0.174
=====
```

```
=====
Omnibus:          112.719  Durbin-Watson:      2.103
Prob(Omnibus):     0.000  Jarque-Bera (JB):    496.078
Skew:              2.244  Prob(JB):      1.90e-108
Kurtosis:          9.136  Cond. No.      4.37e+03
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 4.37e+03. This might indicate that there are strong multicollinearity or other numerical problems.

White Test Results:

LM Statistic: 1.8218072604486721

LM P-Value: 0.873210828237291

F Statistic: 0.35690535526926737

F P-Value: 0.8773863754620966

Regression Summary:

OLS Regression Results

=====

Dep. Variable:

length_db

R-squared:

0.103

Model:

OLS

Adj. R-squared:

0.095

Method:

Least Squares

F-statistic:

12.60

Date:

Wed, 30 Aug 2023

Prob (F-statistic):

6.71e-06

Time:

12:11:57

Log-Likelihood:

-631.52

No. Observations:

218

AIC:

1269.

Df Residuals:

215

BIC:

1279.

Df Model:

2

Covariance Type:

HC3

=====

| | coef | std err | z | P> z | [0.025 | 0.975] | | |
|---|--------|---------|-------|--------|--------|--------|--------|-------------|
| ----- | | | | | | | | |
| const | 9.8343 | 2.578 | 3.815 | 0.000 | 4.782 | 14.886 | | |
| Total debt service (% of exports of goods, services and primary income) | | | | 0.0939 | 0.024 | 3.928 | 0.000 | 0.047 0.141 |
| ln_GDP per capita (constant 2015 US\$) | | -0.8363 | 0.328 | -2.551 | 0.011 | -1.479 | -0.194 | |

=====

Omnibus:

103.101

Durbin-Watson:

2.052

Prob(Omnibus):

0.000

Jarque-Bera (JB):

376.362

Skew:

1.993

Prob(JB):

1.88e-82

Kurtosis:

8.054

Cond. No.

174.

=====

Notes:

[1] Standard Errors are heteroscedasticity robust (HC3)

White Test Results:

LM Statistic: 12.267176301376935

LM P-Value: 0.031304686231020895

F Statistic: 2.5281735108069863

F P-Value: 0.03011989702809418

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|-----------|--------|--------|--------|--------|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.036 | | | | |
| Model: | OLS | Adj. R-squared: | 0.028 | | | | |
| Method: | Least Squares | F-statistic: | 4.786 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.00910 | | | | |
| Time: | 12:11:58 | Log-Likelihood: | -732.51 | | | | |
| No. Observations: | 262 | AIC: | 1471. | | | | |
| Df Residuals: | 259 | BIC: | 1482. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 12.4414 | 2.541 | 4.897 | 0.000 | 7.438 | 17.445 | |
| ln_Total reserves (including gold, current US\$) | -0.2479 | | 0.118 | -2.093 | 0.037 | -0.481 | -0.015 |
| ln_GDP per capita (constant 2015 US\$) | -0.3530 | | 0.220 | -1.605 | 0.110 | -0.786 | 0.080 |
| ===== | | | | | | | |
| Omnibus: | 137.957 | Durbin-Watson: | 1.965 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 633.157 | | | | |
| Skew: | 2.225 | Prob(JB): | 3.25e-138 | | | | |
| Kurtosis: | 9.181 | Cond. No. | 225. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 4.12809620241338
LM P-Value: 0.5311246496956975
F Statistic: 0.8196260331232863
F P-Value: 0.5366161948446788

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.045
Model:              OLS  Adj. R-squared:    0.037
Method:            Least Squares  F-statistic:    5.517
Date:              Wed, 30 Aug 2023  Prob (F-statistic):  0.00456
Time:              12:11:58  Log-Likelihood: -656.92
No. Observations:  235  AIC:              1320.
Df Residuals:      232  BIC:              1330.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              8.7237    1.817    4.802   0.000    5.145   12.303
Total reserves in months of imports -0.2449    0.092   -2.649   0.009   -0.427   -0.063
ln_GDP per capita (constant 2015 US$) -0.4087    0.227   -1.799   0.073   -0.856    0.039
=====
```

```
=====
Omnibus:          128.861  Durbin-Watson:      1.945
Prob(Omnibus):    0.000  Jarque-Bera (JB):    621.043
Skew:             2.264  Prob(JB):            1.39e-135
Kurtosis:         9.551  Cond. No.             62.3
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 7.370472529046123
LM P-Value: 0.1945132461014528
F Statistic: 1.4829694793149655
F P-Value: 0.19622811025381806

Regression Summary:

OLS Regression Results

```
=====
Dep. Variable:      length_db  R-squared:      0.050
Model:              OLS  Adj. R-squared:    0.042
Method:             Least Squares  F-statistic:    6.729
Date:              Wed, 30 Aug 2023  Prob (F-statistic):    0.00142
Time:              12:11:59  Log-Likelihood:   -757.96
No. Observations:   261  AIC:              1522.
Df Residuals:       258  BIC:              1533.
Df Model:           2
Covariance Type:    nonrobust
=====
```

```
=====
              coef  std err      t    P>|t|   [0.025   0.975]
-----
const              10.6936    1.923    5.561    0.000    6.907   14.480
Trade (% of GDP)   -0.0162    0.008   -2.099    0.037   -0.031   -0.001
ln_GDP per capita (constant 2015 US$) -0.5592    0.260   -2.149    0.033   -1.072   -0.047
=====
```

```
=====
Omnibus:           119.742  Durbin-Watson:      2.062
Prob(Omnibus):     0.000  Jarque-Bera (JB):    421.155
Skew:              2.014  Prob(JB):           3.53e-92
Kurtosis:          7.744  Cond. No.           589.
=====
```

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.929468240792227
LM P-Value: 0.3131425885544337
F Statistic: 1.1855657264472983
F P-Value: 0.31663987367902485

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|---|------------------|---------------------|----------|---------|-------|--------|--------|--------|-------|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.013 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.003 | | | | | | |
| Method: | Least Squares | F-statistic: | 1.335 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.265 | | | | | | |
| Time: | 12:11:59 | Log-Likelihood: | -492.15 | | | | | | |
| No. Observations: | 207 | AIC: | 990.3 | | | | | | |
| Df Residuals: | 204 | BIC: | 1000. | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | nonrobust | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | t | P> t | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 5.7530 | 1.270 | 4.529 | 0.000 | 3.249 | 8.257 | | |
| Unemployment, total (% of total labor force) (modeled ILO estimate) | | | | -0.0125 | 0.035 | -0.358 | 0.721 | -0.081 | 0.056 |
| ln_GDP per capita (constant 2015 US\$) | | | | -0.2389 | 0.171 | -1.400 | 0.163 | -0.575 | 0.097 |
| ===== | | | | | | | | | |
| Omnibus: | 67.956 | Durbin-Watson: | 1.615 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 134.862 | | | | | | |
| Skew: | 1.636 | Prob(JB): | 5.19e-30 | | | | | | |
| Kurtosis: | 5.220 | Cond. No. | 80.8 | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 3.091810147916065
LM P-Value: 0.6858337808670723
F Statistic: 0.6095427949038562
F P-Value: 0.692690606412814

Regression Summary:

| OLS Regression Results | | | | | | | | | |
|--|------------------|---------------------|----------|---------|-------|--------|--------|--------|-------|
| ===== | | | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.033 | | | | | | |
| Model: | OLS | Adj. R-squared: | 0.016 | | | | | | |
| Method: | Least Squares | F-statistic: | 1.970 | | | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.144 | | | | | | |
| Time: | 12:11:59 | Log-Likelihood: | -290.20 | | | | | | |
| No. Observations: | 119 | AIC: | 586.4 | | | | | | |
| Df Residuals: | 116 | BIC: | 594.7 | | | | | | |
| Df Model: | 2 | | | | | | | | |
| Covariance Type: | nonrobust | | | | | | | | |
| ===== | | | | | | | | | |
| | | coef | std err | t | P> t | [0.025 | 0.975] | | |
| ----- | | | | | | | | | |
| const | | 4.9106 | 1.978 | 2.482 | 0.014 | 0.992 | 8.829 | | |
| Unemployment, total (% of total labor force) (national estimate) | | | | 0.0699 | 0.038 | 1.863 | 0.065 | -0.004 | 0.144 |
| ln_GDP per capita (constant 2015 US\$) | | | | -0.1877 | 0.237 | -0.793 | 0.429 | -0.656 | 0.281 |
| ===== | | | | | | | | | |
| Omnibus: | 56.547 | Durbin-Watson: | 2.064 | | | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 150.753 | | | | | | |
| Skew: | 1.877 | Prob(JB): | 1.84e-33 | | | | | | |
| Kurtosis: | 7.039 | Cond. No. | 101. | | | | | | |
| ===== | | | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.785057214590485
LM P-Value: 0.3276988125304148
F Statistic: 1.154814813602452
F P-Value: 0.33594240841367884

Regression Summary:

| OLS Regression Results | | | | | | | |
|--|------------------|---------------------|----------|-------|--------|--------|--|
| ===== | | | | | | | |
| Dep. Variable: | length_db | R-squared: | 0.030 | | | | |
| Model: | OLS | Adj. R-squared: | 0.021 | | | | |
| Method: | Least Squares | F-statistic: | 3.449 | | | | |
| Date: | Wed, 30 Aug 2023 | Prob (F-statistic): | 0.0335 | | | | |
| Time: | 12:12:00 | Log-Likelihood: | -654.35 | | | | |
| No. Observations: | 224 | AIC: | 1315. | | | | |
| Df Residuals: | 221 | BIC: | 1325. | | | | |
| Df Model: | 2 | | | | | | |
| Covariance Type: | nonrobust | | | | | | |
| ===== | | | | | | | |
| | coef | std err | t | P> t | [0.025 | 0.975] | |
| ----- | | | | | | | |
| const | 11.0383 | 2.333 | 4.731 | 0.000 | 6.440 | 15.636 | |
| ln_Use of IMF credit (DOD, current US\$) | -0.0231 | 0.019 | -1.248 | 0.213 | -0.060 | 0.013 | |
| ln_GDP per capita (constant 2015 US\$) | -0.7555 | 0.306 | -2.469 | 0.014 | -1.359 | -0.152 | |
| ===== | | | | | | | |
| Omnibus: | 114.003 | Durbin-Watson: | 2.119 | | | | |
| Prob(Omnibus): | 0.000 | Jarque-Bera (JB): | 446.129 | | | | |
| Skew: | 2.154 | Prob(JB): | 1.33e-97 | | | | |
| Kurtosis: | 8.408 | Cond. No. | 176. | | | | |
| ===== | | | | | | | |

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

White Test Results:

LM Statistic: 5.91212148287131
LM P-Value: 0.3148640328750265
F Statistic: 1.1819478386688247
F P-Value: 0.3189762159441891